IN THE SPECIFICATION

Page 1, insert as a separate paragraph following the title:

--This application is a continuation of Appln. 08/832,443, filed April 3, 1997, now allowed; which is a continuation-in-part of Appln. No. 08/627,173, filed April 3, 1996, now U.S. Patent 5,861,483.--

Page 21, first paragraph, replace with:

The invention also includes peptides having the sequences:
Phe-Pro-His-Phe-Asp-Leu-Ser-His-Gly-Ser-Ala-Gln-Val (SEQ ID NO:1) ("Peptide 43-55"),
Cys-Phe-Pro-His-Phe-Asp-Leu-Ser-His-Gly-Ser-Ala-Gln-Val-Cys (SEQ ID NO:2)
where the two Cys residues form a disulfide bond ("Cyclic Peptide 43-55"),
Cys-Phe-Pro-His-Phe-Asp-Leu-Ser-His-Gly-Ser-Ala-Gln-Val-Cys
where the two Cys residues are joined by a carbon bridge,
Asp-Ala-Leu-Thr-Asn-Ala-Val-Ala-His-Val-Asp-Asp-Met-Pro-Asn-Ala-Leu-Ser-Ala (SEQ ID NO:3 ("Peptide 64-82"), and
a peptide comprising the first 97 N-terminal amino acids of human alpha hemoglobin as in Fig. 16A.

Page 24, third paragraph, replace with:

The invention also includes a method of inhibiting or stimulating stem cell proliferation comprising contacting hematopoietic cells with a peptide selected from the group of hemorphin peptides having the sequence:
Leu-Val-Val-Tyr-Pro-Trp-Thr-Gln-Arg-Phe (SEQ ID NO:4),
Leu-Val-Val-Tyr-Pro-Trp-Thr-Gln-Arg (SEQ ID NO:5),
Leu-Val-Val-Tyr-Pro-Trp-Thr-Gln (SEQ ID NO:6),
Leu-Val-Val-Tyr-Pro-Trp-Thr (SEQ ID NO:7),
Leu-Val-Val-Tyr-Pro-Trp (SEQ ID NO:8),
Leu-Val-Val-Tyr-Pro (SEQ ID NO:9),
Val-Val-Tyr-Pro-Trp-Thr-Gln (SEQ ID NO:10),

Tyr-Pro-Trp-Thr-Gln-Arg-Phe (SEQ ID NO:11),
Tyr-Pro-Trp-Thr-Gln-Arg (SEQ ID NO:12),
Tyr-Pro-Trp-Thr-Gln (SEQ ID NO:13), and
Tyr-Pro-Trp-Thr (SEQ ID NO:27).

Page 25, second paragraph, replace with:

The invention also includes a method of inhibiting or stimulating stem cell proliferation comprising contacting hematopoietic cells with a peptide selected from the group consisting of Tyr-MIF- 1 related peptides, casomorphins, cytochrophins and exorphins. Specifically included are the Tyr-MIF-1 peptides having the sequences:
Tyr-Pro-Try-Gly-NH_2 (SEQ ID NO:28),
Tyr-Pro-Lys-Gly-NH_2 (SEQ ID NO:29),
Tyr-Pro-Leu-Gly-NH_2 (SEQ ID NO:30), and
Pro-Leu-Gly-NH_2.

Pages 25-26, third paragraph, replace with:

The invention also includes a method of inhibiting or stimulating stem cell proliferation comprising contacting hematopoietic cells with an opiate peptide selected from the group consisting of
(D-Ala^2,N-Me-Phe^4,Gly-ol^5)-Enkephalin (DAMGO),
(D-Arg^2,Lys^4)-Dermorphin-(1-4)-amide (DALDA),
(Phe^4)-Dermorphine (1-4) amide
Ac-Arg-Phe-Met-Trp-Met-Arg-NH_2 (SEQ ID NO:14),
Ac-Arg-Phe-Met-Trp-Met-Lys-NH_2 (SEQ ID NO:31), and
H-Tyr-Gly-Gly-Phe-Met-Arg-Arg-Val-NH_2 (SEQ ID NO:32).

Page 31, second paragraph, replace with:

Figure 16 shows hemoglobin sequences: Fig. 16A shows the cDNA (SEQ ID NO:15) and amino acid (SEQ ID NO:16) sequences of human alpha hemoglobin and Fig. 16B shows the cDNA (SEQ ID NO:17) and amino acid (SEQ ID NO:18) sequences of

human beta hemoglobin. Numbering is according to the amino acid. Fig. 16C shows an amino acid sequence comparison of the alpha and beta chains of human, (SEQ ID NO:16 and SEQ ID NO:18) murine (SEQ ID NO:19 and SEQ ID NO:20) and porcine (SEQ ID NO: 21 and SEQ ID NO:22) hemoglobins.

Page 71, second paragraph, replace with:

pINPROL was prepared as shown in Fig. 5 (i.e., pINPROL Preparation 1 (see Example 12B)). The material as run on SDS-PAGE and transferred to nitrocelluose using standard techniques. The material was subjected to N-terminal sequence analysis using an ABI 477A protein sequencer with 120A Online PTH-AA analyzer using standard techniques. The following N-terminal sequence was obtained:

VHLSAEEKEAVLGLWGKVNVDEV . . . (SEQ ID NO:23)

Computer search of the protein databases reveal that this sequence has identity with the N-terminal sequence of the beta chain of porcine hemoglobin (cf. Fig. 16C).

Pages 71-72, third paragraph, replace with:

As shown in Fig. 15c, protein purified by collecting the second major peak shown in Fig. 5 (i.e., pINPROL Preparation 2) resulted in two major bands corresponding to molecular weights of approximately 15K and 30K, as well as several minor bands. SDS-PAGE gels were transferred to introcellulose using standard techniques and individual bands were excised and subjected to N-terminal sequence analysis as in Example 13A. The following N-terminal sequence was obtained for the 15kD band:

VLSAADKANVKAAWGKVGGQ . . . (SEQ ID NO:24)

The 30 kD band was subjected to limited proteolytic digest and the following internal sequences was obtained: ** FPHFNLSHGSDQVK . . . (SEQ ID NO:25).

Page 82, third paragraph, replace with:

Two hemorphin sequences, hemorphin 10 (amino acids 32-41 of the beta chain sequence) and hemorphin 7 (amino acids 33-40) were tested and found to be active. The sequences are as follows:

Hermorphin 10	Leu-Val-Val-Tyr-Pro-Trp-Thr-Gln-Arg-Phe (SEQ ID NO:4)
Hemorphin 7	Val-Val-Tyr-Pro-Trp-Thr-Gln-Arg (SEQ ID NO:26)